IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

DIGI PORTAL LLC,	CASE NO. 18-cv-01485-LPS-CJB
Plaintiff,	
v.	**PATENT CASE**
QUOTIENT TECHNOLOGY INC.,	**JURY TRIAL DEMANDED**
Defendant.	

PLAINTIFF DIGI PORTAL LLC'S OPPOSITION TO DEFENDANT QUOTIENT TECHNOLOGY INC.'S MOTION TO DISMISS FOR FAILURE TO STATE A CLAIM

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Plaintiff Digi Portal LLC ("Digi Portal") hereby files this Opposition to Defendant Quotient Technology Inc.'s ("Quotient") Motion to Dismiss for Failure to State a Claim (D.I. 11, 12) ("§101 Motion").

I.   STATEMENT OF THE NATURE AND STAGE OF THE PROCEEDINGS

Quotient's Nature and Stage of the Proceedings incorrectly describes the accusation of infringement in Digi Portal's Complaint as "targeted advertising" by excerpting quotes from two distant paragraphs, 27 and 34, and skipping over the bulk of the infringement analysis. (D.I. 12 at 1). The focus of the infringement allegation in the Complaint relates to the limitations related to the template program unique to the user that is based on configuration data including user demographic information, and that the template program is received from one of at least two locations, the location determined from the frequency of the user request. (D.I. 1 at ¶¶28-33).

II.   SUMMARY OF THE ARGUMENT

Quotient's contention that the claims are invalid under 35 U.S.C. §101 ("§101") misunderstands the point of the invention. Quotient argues that the claims are directed to "the abstract idea of providing targeted advertising to a user." (D.I. 12 at 1). As is evident from the patent and prosecution history, this is not the point of the invention. The background of the invention does not refer at all to providing targeted advertising. Targeted advertising is tangentially mentioned in only two adjacent sentences in the specification. During the prosecution history, targeted advertising was never used to distinguish the independent claims over the prior art. And advertising is only discussed in four of the 15 lines of claim 1.

Instead, as explained in the Background of the Invention, the invention relates to providing "a custom page server which can quickly serve custom pages and is scalable to handle many users simultaneously." (Ex. A at col. 1:28-30). Prior art methods of providing customized webpages had long transfer times, clogged the data stream, and provided outdated data. The inventors

recognized that there was a need to dynamically generate customized pages in a more efficient way that was scalable. The inventors solved the problem in a particular way: rather than using a generic template with customized data or common gateway interfaces, the claims use a template program that is configured uniquely to the user and building using user supplied configuration information, and the user-specific template program is then stored at two or more locations based on the frequency of the user requests for the customized page. These inventive aspects of the claims have nothing to do with advertising on customized pages and instead have to do with more quickly serving customized pages in a scalable way.

In other words, "these claims are directed to a particular manner [to implement the idea] in electronic devices." *Core Wireless Licensing v. LG Elecs., Inc.*, 880 F.3d 1356, 1362 (Fed.Cir. 2018). Rather than generally addressing targeted advertising, the "claims are directed to a specific implementation of a solution to a problem in the software arts." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1339 (Fed.Cir. 2016) (*citing Alice Corp. Pty. v. CLS Bank Int'l*, 134 S.Ct. 2347, 2354 (2014)); *also DDR Holdings, LLC v. Hotels.com*, 773 F.3d 1245, 1257 (Fed.Cir. 2014); *Finjan, Inc. v. Blue Coat Sys.*, 879 F.3d 1299, 1305 (Fed.Cir. 2018).   The claims improve upon the prior art in a new way by allowing requested customized pages to be provided more efficiently to users in a manner that is scalable. The claims are therefore not directed to an abstract idea.

The claims are also patentable under step two of the §101 analysis, because the claims are not monopolizing the abstract idea of "providing targeted advertising to a user" or providing a customized user page with an advertisement. The claims have material, non-generic limitations, including using a template program built unique to the user based on user-supplied configuration information including demographic information, retrieving the template program from at least two locations, and the locations are determined from the frequency of the user request. At most,

Defendant's arguments contradicting the unconventional solution described in the specification at best raise genuine issues of material fact that are not appropriately decided at the stage of Rule 12(b)(6), Fed.R.Civ.P. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1370 (Fed.Cir. 2018). The Court should therefore deny Defendant's motion to dismiss under §101.

III.   CONCISE STATEMENT OF THE FACTS

The invention in the U.S. Patent No. 8,352,854 ("the '854 Patent") relates to the field of customized information presentation on the web; more specifically, providing customized pages that are quickly served and scalable to handle many users simultaneously. (Id. at col. 1:26-30). Although the claims have limitations to customized advertising, the claims instead provide a particular solution to address the efficiency and scalability of providing customized webpages.

A.   Prior Art Methods for Serving Customized Pages Were Inefficient and Not Scalable

Web servers for serving static (fixed information) webpages were well known in the global Internet. (*Id*. at col. 1:31-32). Static webpages are useful in many applications, such as providing the same information to many users, but some applications require customization to appeal to users. (*Id*. at col. 1:32-35). For example, when presenting news to users, customized webpages present news that is more relevant to the requesting user than static pages because the information is filtered according to each user's interest. (*Id*. at col. 1:35-37, 40-41).

Customizing a server response based on the requester was known; however, known systems did not scale well. (*Id.* at col. 1:42-43). One method of serving custom pages is to execute a script, such as a Common Gateway Interface (CGI) script or other program to collect the information necessary to generate the custom page. (*Id.* at col. 1:43-47). For example, if the custom page is a news page containing stock quotes, sports scores and weather, the script might poll a stock quote server to obtain the quotes of interest, poll a sports score server to obtain the

scores of interest, and poll a weather server to obtain the weather. (*Id.* at col. 1:47-51). With this information, the server generates the custom page and returns it to the user. (*Id.* at col. 1:51-52). This approach is only useful where there are not many requesters and where the delay associated with polling various servers is acceptable. (*Id.* at col. 1:53-54). Growing impatience with waiting will turn users away from such servers, especially as use increases. (*Id.* at col. 1:54-58).

One approach that was used in the prior art to avoid long waits was to transfer the custom information in non-real-time, so that the information is stored local to the user as it arrives and is presented to the user on request. (*Id.* at col. 1:59-62). A disadvantage of such a system is that the networks used by the user become clogged with data continually streaming to the user and require large amounts of local storage. (*Id.* at col. 1:62-65). Another disadvantage is that the locally stored information will become outdated as the server receives new data. (*Id.* at col. 1:65-67).

The inventors therefore recognized that there was a need to dynamically generate customized pages in an unconventional manner that solved the technical problems in the prior art of long transfer times to obtain the requested information or having to rely on continually transferring custom information in non-real time which can clog the data network in addition to providing outdated information. (*Id.* at col. 1:42 to col. 2:2).

B.   The Claims of the '854 Patent Are Directed to an Improved Way of Serving Customized Webpages

The claims of the '854 patent provide a new way of achieving the benefit of quickly serving customized webpages in a manner that is scalable to handle many users simultaneously. Digi Portal will be asserting claims 1-3, 8-10, and 15. This opposition will focus on claim 1 because that is the only claim materially addressed in Defendant's §101 Motion. Claim 1 states:

1. A method comprising:

receiving a user request for a customized page;

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> receiving a template program that is unique to the user and based on user configuration information, the user configuration information being supplied by the user and used to build the template program that is unique to the user, the user configuration information including user demographic information, and wherein the template program is received from one of at least two locations, the location determined from the frequency of the user request for the customized page;
>
> *receiving an advertisement selected in accordance to the user demographic information;*
>
> *executing the template program using the selected advertisement to generate the customized page; and*
>
> *providing the customized page to the user.*

(Ex. A at col. 6:66 – col. 7:14). The main improvements of the invention are underlined, whereas the italics highlight the language on which Defendant's §101 Motion focuses.

C.   The Specification Discloses Examples, Including Source Code, of the Claimed Features

The specification provides non-limiting examples of how to generate the template program unique to the user and based on user configuration information (including demographic information) provided by the users. A front-page generator generates a user template from a global template and a user configuration record. (Ex. A at Fig. 2, col. 3:58-62). Figure 3 is an exemplary global template (204) with placeholders (302) to insert template information based on user configuration information. (Ex. A at Fig. 3, col. 5:16-19). User configuration information includes user demographic information, such as sex, age, location, stock quotes, favorite sports teams, news topics. (*Id.* at col. 2:13-14, col. 5:45-50, col. 6:37-39, 46-48, 52-56).

Figure 4 is an exemplary generated template program unique to the user that is based on user configuration information (including demographic information) provided by the user. (Ex. 4 at Fig. 4). The user template is unique because it is built based on user demographic information provided by the user, as opposed to generically chosen dynamic information or based on

information provided by the server. Exemplary demographic information is shown in line 2 of
Fig. 4 (":M,85,95035,T,*") indicating that the user is a male, age 85, located in zip code 95035,
etc. (*Id.* at col. 5:42-45). The '854 patent includes a full listing of an exemplary user template of
Fig. 4 in Appendix A. (Ex. A at col. 2:57-58; col. 5:22-23; Ex. B at Col. 7-11).

One benefit of the claimed invention that speeds up the operation of the dynamic page
generation is that the user specific template can be stored in multiple locations that are based on
the frequency by which the user requests the customized page based on the user template. (*Id.* at
col. 5:37-38, col. 6:49-59). Some users might choose to access their user page infrequently, while
others might choose to access their front page hourly. (*Id.* at col. 6: 52-54). For infrequent users,
the user template is stored in a user configuration database, whereas for frequent users the user
template may also be stored in cache. (*Id.* at col. 5:37-38, col. 6:51-59). Caching reduces the time
to respond to a request for a page and is more effective where the typical user makes several
requests in a short time span and then doesn't make any requests for a long period of time. (*Id.* at
col. 5:29-32). When the user template is stored in cache, it may be stored long enough to be reused
and may also be flushed from cache due to inactivity. (*Id.* at col. 6:49-52, 59-60). Even if it is
flushed from cache, the user template can be maintained in the user configuration database, which
can be quickly accessed and stored in cache when a user starts to access the user page. (*Id.*).

Appendix B of the '854 patent is an HTML source code listing of an HTML page created
from an executed user template that is used to generate a user customized browser web page. (Ex,
A at col. 2:58-60; Ex. B at col. 11 – col. 19).

      D.   **The Prosecution History Explains the Unconventional and Non-Generic
Features of the Claimed Invention that Make the Generation of Dynamic
Webpages Quicker, More Efficient, and Use Less Resources**

As explained the '854 patent and prosecution history, there are unconventional and non-
generic features of the claimed invention, which are technical improvements that make the

generation of dynamic webpages quicker, more efficient, and use less resources.   During the prosecution history, the targeted advertising limitations in the claims was never used to distinguish the claimed invention from the prior art.   Instead, the type of customized template and the storage of that template was used to distinguish the claimed invention over the prior art.

The claims were distinguished from the prior art by explaining that storing a customized user template was different from customization consisting of using demographic information to select a banner advertisement.   (Ex. C at 8).   A customized template must be used rather than a generic template with customized information such as advertisements.   (Ex. C at 8-9, Ex. D at 6). A customized user template conserves network and database resources.   (*See id.* at col. 4:10-11, col. 5:23-32).   By also storing the user customized template, even if the cache is cleared, the template already exists in storage which prevents having to regenerate a new user customized page thus saving database and server resources and more quickly generating the requested web page from the user customized template.   (*E.g.*, *id.* at col. 3:37-39, col. 4:1-11, 49-62).

The storage of a user customized template program in at least two locations and the location determined from the frequency of the user request for the customized page was an unconventional and non-generic method for storing such templates.   (Ex. C at 9).   By storing the user customized template program in two locations in which the location is determined by frequency, the invention is more efficient and allows for a quicker response than the prior art.   For example, by storing the user customized template in user configuration database and in cache, the dynamic generation of a user customized web page is more efficient and uses less resources of the server, database, and network, and allows for a quicker generation of the dynamic web page thereby allowing the server to scale in order to handle substantially more requests for user customized dynamic webpages.

(*See* Ex. A at col. 1:42-67, col. 4:49-col. 5:15, col. 5:23-32). The prior art stored the webpages on the same server rather than at different locations. (Ex. C at 9).

IV.   STATEMENT OF THE LAW

A patent is presumed valid and the burden of establishing invalidity of any patent claim rests on the party asserting invalidity. 35 U.S.C. §282; *Microsoft Corp. v. i4i Ltd.*, 131 S.Ct. 2238, 2245 (2011); *Commil USA, LLC v. Cisco Sys.*, 135 S.Ct. 1920, 1929 (2015). This applies any time an infringer argues "that the patent should never have issued in the first place." *Microsoft*, 131 S.Ct. at 2242. Invalidity must be proven by clear and convincing evidence. *Id.* at 1250; *Commil*, 135 S.Ct. at 1929.   Moreover, on "a motion to dismiss under Rule 12(b)(6), [ ] all factual inferences drawn from the specification must be weighed in favor of [ ] the non-moving party." *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1261-62 (Fed.Cir. 2017).

Section 101 defines patent eligible subject matters as "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. §101. All inventions in effect embody, use, or apply laws of nature, natural phenomena, or abstract ideas so an invention is not patent-ineligible merely because it involves one of these. *Alice Corp.*, 134 S.Ct. at 2354.   Although patenting a building block of ingenuity risks disproportionately tying up the use of the underlying ideas, integrating the building blocks into something more "pose[s] no comparable risk of pre-emption." *Id.* at 2354-55.

The analysis of whether an invention is directed to an abstract idea under §101 consists of two steps. *Mayo Collaborative Serv. v. Prometheus Labs., Inc.*, 132 S.Ct. 1289, 1296-1297 (2012). The first step "determine[s] whether the claims at issue are directed to one of those patent-ineligible concepts." *Alice Corp.*, 134 S.Ct. at 2355. If the claims are not directed to a patent ineligible concept, then the analysis ends because the claims are patentable under §101.

However, if the Court finds that the claims are directed to a patent ineligible concept, then the Court turns to the second step and "examine[s] the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice Corp.*, 134 S.Ct. at 2357 (*citing Mayo*, 132 S.Ct. at 1294, 1298). Even if an invention recites an abstract idea, the invention is patentable if it has "additional features to ensure that the claim is more than drafted to monopolize the abstract idea." *Id.* (*citing Mayo*, 132 S.Ct. at 1297).   The limitations must be considered both individually and as an ordered combination in this step. *Id.* at 2355.

If "the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks," then software claims are not abstract. *DDR Holdings*, 773 F.3d at 1257. Similarly, software claims are patent eligible when they "enable[] a computer [ ] system to do things it could not do before." *Finjan*, 879 F.3 at 1305. Even if the claims use only generic computers, software claims are patent-eligible if the claims do not preempt the abstract idea on the Internet or on generic computer parts performing conventional activities. *Bascom Global Internet Serv. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350-51 (Fed.Cir. 2016); *Enfish*, 822 F.3d at 1338. So long as the novelty is not simply using a computer, "processes that automate tasks that humans are capable of performing are patent eligible if properly claimed." *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed.Cir. 2016).

Although determination of patent eligibility under §101 is a question of law, there can be subsidiary fact questions that must be resolved in route to the ultimate legal determination. *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed.Cir. 2018). For example, whether the claim elements or claimed combination are well-understood, routine, or conventional is a question of fact. *Id.* Such fact questions may not be able to be answered adverse to the patentee

based on the sources properly considered in a motion to dismiss, such as the complaint, patent, and materials subject to judicial notice. *Id.*

V.   ARGUMENT

On a motion to dismiss under Rule 12(b)(6), all factual inferences must be weighed in favor of Digi Portal. *Visual Memory*, 867 F.3d 1261-62. When the facts are weighed in Digi Portal's favor, Defendant has not proven that the claims are invalid under §101 by clear and convincing evidence or, at a minimum, are insufficient to find against Digi Portal at the Rule 12(b)(6) phase of the case. First, Defendant's alleged abstract idea, "providing targeted advertising to a user," is not what the claims are directed to. Providing targeted advertising to a user is a minor aspect of the invention. Instead, the invention improves providing customized dynamically generated webpages using customized unique templates served from multiple locations. The claimed invention is more efficient and uses less resources of the server, database, and network, and allows for a quicker generation of the dynamic web page thereby allowing the server to scale in order to handle substantially more requests for dynamic webpages customized for a user.

Even if the Court were to adopt Defendant's alleged abstract idea, the claims have additional features to ensure that the claims are more than drafted to monopolize the abstract idea of "providing targeted advertising to a user." For example, the claim requires generating a unique template program that is customized based on demographic information provided by the user and the template program is stored in at least two different locations determined from the frequency of the user request for the customized page. Defendant's §101 Motion should therefore be denied.

A.   The Claims in the Patent-in-Suit do not Recite an Abstract Idea

The claimed inventions are patent-eligible under the first step of the §101 analysis because they do not recite an abstract idea. With analyzing software, the Federal Circuit held that the inquiry in the first step is "whether the focus of the claims is on the specific asserted improvement

in computer capabilities… or instead, on a process that qualifies as an 'abstract idea.'" *Enfish*, 822 F.3d at 1335-36. The claims here are directed to improved computer functionality and do not recite a mathematical algorithm, an economic practice, or a pre-computer business practice. *Id.* at 1336; *DDR Holdings*, 773 F.3d at 1257; *McRO*, 837 F.3d at 1314. The claims are patent-eligible because they are rooted in a particular computer technology that necessarily requires a computer system and enable the computer system to do things that it could not do before. *Enfish*, 822 F.3d at 1336*; Finjan*, 879 F.3d at 1305; *Core Wireless*, 880 F.3d at 1363.

1. Defendant's Abstract Idea is Untethered to the Claim Language

Defendant's overly broad abstract idea is not tied to the claim language because it does not address the problem of serving dynamically generated webpages. *Enfish*, 822 F.3d at 1337. Defendant's alleged abstract idea is "providing targeted advertising to a user." (D.I. 12 at 1). Targeted advertising is only four of the fifteen lines of claim 1 and is only minimally discussed in two adjacent sentences in the "Description of the Preferred Embodiments" in the specification. (Ex. A at col. 5:39-45; col. 7:10-14). Focusing on targeted advertising misses the purposes of the invention, which is to improve how customized webpages are provided to users.

As explained in the specification, providing customized webpages and customized advertisements was known in the art. (Ex. A at col. 1:42-65). However, the prior art systems did not scale well, clogged networks with data, or relied on outdated local data. (*Id.*). The inventors developed a method that solved the problem with efficiently serving customized webpages. (*Id.* at col. 1:27-30). The invention solves the problem in a particular way: using a template program that is then customized for a user to create a unique user template program based on demographic information provided by the user and the template program is received from one of at least two locations determined by the frequency of the user request for the customized page. (*Id.* at col. 7:1-9). By not addressing the problem solved by the invention, Defendant's abstract idea should be

rejected because it is improperly at such a high level of abstraction as to be untethered to the claim language. *Enfish*, 822 F.3d at 1337 (*citing Alice*, 134 S.Ct. at 2354); *also McRO*, 837 F.3d at 1313; *Core Wireless*, 880 F.3d at 1362.

The Federal Circuit has cautioned against describing the claims in a way that is untethered to the claim language. *Enfish*, 822 F.3d at 1337 (*citing Alice*, 134 S.Ct. at 2354); *also McRO*, 837 F.3d at 1313; *Core Wireless*, 880 F.3d at 1361-62. Yet, Defendant only focus on a minor aspect of the claims. The claims do not simply cover targeted advertising and instead cover a specific way of serving dynamically generated customized webpages. In the prosecution history, targeted advertising was distinguished from using a customized template to dynamically generate customized webpages. The applicant explained that the prior art that disclosed "using demographic information to select a banner advertisement to be included in the web page" was "silent as to template program, and is further silent with respect to template program that is specific to a user, receiving a template program that is specific to a user based on user configuration information, and/or executing such a received template program to generate a customized page." (Ex. C at 8-9). The claims therefore do not simply cover the abstract idea of targeted advertising and instead claim a new way of generating customized webpages to improve the efficiency and scalability of serving such pages.

Defendant tries to analogize the claimed invention to a realtor's job. (D.I. 12 at 9-10). However, the Federal Circuit has held that it "is not enough [ ] to merely trace the invention to some real-world analogy." *Data Engines Techs. LLC v. Google LLC*, 906 F.3d 999, 1101 (Fed.Cir. 2018). In reaching this analogy, Defendant contends that you "must look past the claim language." (D.I. 12 at 8). Yet, the Federal Circuit has held the opposite: the Court "must consider the claim as a whole to determine whether the claim is directed to an abstract idea or something more." *Id.*

Just like in *Data Engines*, Defendant "fails to appreciate the functional improvement achieved by the specifically recited [limitations] in the claimed methods." *Id.* The invention is not targeted advertising. Instead, the invention is using a customized template built based on user supplied configuration information (including demographic information) and the customized template is received from one of at least two locations, and the location is determined based on the frequency of the user request for the customized page. (Ex. A at col. 7:1-9).

Defendant argues that the patent does not "disclose any special or improved way of providing targeted advertising." (D.I. 12 at 10). Again, that is because the patent isn't improving providing targeting advertising and is instead improving the efficiency and scalability of responding to requests for the delivery of customized dynamically generated webpages to users. (*Id.* at col. 1:27-30). The specification provided source code explaining the improvements of the claimed invention. (*Supra* §III.C; *infra* §V.A.2). Defendant does not dispute these improvements and, even if it did, this would at most raises a genuine issue of material facts that is not properly decided at the Rule 12(b)(6) phase. *Berkheimer*, 881 F.3d at 1370.

2. Claim 1 of the '854 Patent is Directed to Specific Asserted Improvements in Computer Capabilities

Software-based patent claims are patent-eligible when "the focus of the claims is on the specific asserted improvement in computer capabilities." *Enfish*, 822 F.3d at 1335-36. The focus of claim 1 of the '854 patent is not "providing targeted advertising to a user." Instead, the focus of the claim is a method of using "a custom page server which can quickly serve custom pages and is scalable to handle many users simultaneous." (Ex. A at col. 1:28-30). The claims perform this in a very particular way. A template program unique to the user is built based on user supplied configuration information including demographic information. (*Id.* at col. 7:2-6). The template program that is unique to the user is then stored in at least two locations from where it can be

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retrieved. (*Id.* at col. 7:6-7). The locations where the template program are stored are determined

from the frequency of the user request for the customized page. (*Id.* at col. 7:9-10). These are the

steps of the claim that allow a page server to more quickly serve custom pages that is scalable to

many users simultaneous. Then the claim has the additional steps of receiving an advertisement

selected based on the demographics, executing the template program and providing the customized

page to the user. (*Id.* at col. 7:10-13). The focus on the improved method of serving dynamically

generated customized webpages means that the claims are rooted in a computer technology that

necessarily requires a computer and are directed to patent-eligible subject matter. *Enfish*, 822 F.3d

at 1336*; Finjan*, 879 F.3d at 1305; *Core Wireless*, 880 F.3d at 1362-63.

Defendant argues that the "specification provides no special instruction, much less any

information at all, on how the template program is executed using the selected advertisement."

(D.I. 12 at 12). This, again, misses the point of the claimed invention. Instead, the specification

provides extensive details of how to implement the claimed invention focusing on the elements

that provide benefits over the prior art methods of dynamically serving customized webpages. *See*

Enfish, 822 F.3d at 1337 (looking to the specification to find benefits over the prior art); *McRO*,

837 F.3d at 1314; *Core Wireless*, 880 F.3d 1363. Figure 3 is an example of a global user template

with placeholders to customize the webpage for the user. (Ex. A at Fig. 3; col. 5:16-19). An

exemplary user configuration record containing demographic information, such as sex, age,

location, stock quotes, favorite sports teams, and news topics, is also described. (*Id.* at col. 2:13-

14, col. 5:45-50, col. 6:37-39, 46-48, 52-56). Figure 4 is an exemplary customized template

generated from global user template and a user configuration record to include certain stock quotes,

sports scores, and weather. (Ex. A at Fig. 4; col. 5:42-45). The '854 patent incorporates nine

pages of code exemplifying an HTML source code listing of an HTML page created from an

executed user template that is used to generate a user customized browser web page. (Ex. A at col. 2:58-60; Ex. B at col. 11 – col. 19). The specification also explains how unique user templates do not need to be generated each time and, instead, can be stored in more than one location based on the frequency with which a user accesses the custom generated pages. (*Id.* at col. 4:49 – col. 5:32). By storing a user-unique template rather user configuration data, a step is saved and there is a reduced time to respond to the page request. (*Id.* at col. 5:27-29). Figure 5 is the dynamically generated user page created from the template unique to the user. (Ex. A at col. 5:56-63).

In the prosecution history, the applicant argued that claimed features distinguished the claimed information from the prior art including using a template program built specific to a user based on user configuration information, receiving the template program from one of at least two locations, and the location determined based on the frequency of the user request for the page. (Ex. C at 8-9, Ex. D at 6). None of the ways in which the claimed invention was distinguished from the prior art relies on customized advertising. Instead, they focus on novel limitations that improve the efficiency and scalability of responding to requests for the delivery of customized dynamically generated webpages to users. The claims are therefore patent-eligible because they are "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *DDR Holdings*, 773 F.3d at 1257; *also id.* at 1256-57; *Enfish*, 822 F.3d at 1339; *McRO*, 837 F.3d at 1313, 1316.

3. Claim 1 is Not Required to Reference Hardware

Defendant implies that the claims are unpatentable because they can work on a general-purpose computer. The fact that the invention can run on a general purpose computer does not "doom[ ] the claims" because the claims "are directed to an improvement in the functioning of a computer." *Enfish*, 822 F.3d at 1338; *also Bascom*, 827 F.3d at 1350-51. This is **not** a situation in which "general-purpose computer components are added post-hoc to a fundamental economic

practice or mathematical equation." *Enfish*, 822 F.3d at 1339; Instead, this invention is one that can only exist on computers because it is an improvement to the efficiency and scalability of responding to requests for the delivery of customized dynamically generated webpages to users. Defendant does not allege that anyone previously dynamically created customized webpages in the manner described in the claims. Nor does Defendant allege that anyone previously created customized templates unique to a user based on user supplied demographic information and the template is retrieved from one of at least two locations based on the frequency of the user request for a customized web page. Like in *McRO*, although the invention may embody software processed by a general-purpose computer, the claims are patent eligible because there is no evidence that the process was previously performed. *McRO*, 837 F.3d at 1314.

At this Rule 12(b)(6) stage, where all factual inferences drawn from the specification must be weighed in favor of Digi Portal, the claims are "directed to the arguably unconventional inventive concept described in the specification" that prevents granting Defendant's §101 Motion. *Berkheimer*, 881 F.3d at 1370.

> **B.**   **Claim 1 Has Material, Non-Generic Limitations, Including Using a Template Program Built Unique to the User Based on User Supplied Information including Demographic Information, and Retrieving the Template Program from at Least Two Locations, and the Locations Determined from the Frequency of the User Request**

Even if the Court finds that Defendant's alleged abstract idea is applicable to the claims, the claims are patent eligible under the second step of the §101 analysis. The second step of a §101 analysis "examine[s] the elements of the claim [individually and as an ordered combination] to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 134 S.Ct. at 2357.

Claim 1 is not monopolizing the abstract idea of "providing targeted advertising to a user" or providing a customized user page with an advertisement. As explained above and in the

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specification and prosecution history, the invention is not even directed to that idea. Instead, the claims are improving the efficiency and scalability of responding to requests for the delivery of customized dynamically generated webpages to users. The claim improves the efficiency and scalability using several material and non-generic limitations in the claim. As explained in the specification, there were other ways in the prior art of delivering customized dynamically generated webpages to users. (Ex. A at col. 1:42-67). However, the other ways were slow, non-scalable, used non-real-time data requiring local storage, and clogged the data streams. (*Id.*).

To solve the problem of inefficient and non-scalable delivery of customized dynamically generated webpages to users, the claimed invention has several important features. First, the claim requires receiving a template unique to the user that is built based on user supplied demographic information. (Ex. A at col. 7:1-6). Using a template unique to the user got around the problem of scalability of prior art methods. (Ex. A at col. 1:53-58). By storing and using a template unique to the user, the system "save[s] a step and reduce[s] the time to respond to a request for a page." (*Id.* at col. 5:27-29). Second, using user configuration information that is supplied by the user to build a template that is unique to the user is not found in the prior art and was used to distinguish the claimed invention during the prosecution history. (Ex. D at 6). Third, retrieving the template program from at least two locations was also used during the prosecution history to distinguish the claimed invention from the prior art. (Ex. C at 9). Storing information in two location allows for a quick recovery if one storage location crashes. (Ex. A at col. 4 at 12-22). And, fourth, the claim was also distinguished from the prior art by the requirement that the location for retrieving the template specific to the user is determined by the frequency of the user request for the customized page. (Ex. C at 9). Storing the template based on the frequency of a user request is a more effective way to store the template to save time in responding to a user request. (Ex. A at col. 5:27-32).

These multiple material, non-generic limitations showing an inventive concept that does not monopolizing the abstract idea of "providing targeted advertising to a user" or responding to requests for the delivery of customized dynamically generated webpages to users. *See DDR Holdings,* 773 F.3d at 1259; *McRO*, 837 F.3d at 1315.

Defendant's contend that there are no benefits to the invention. However, as explained above, the specification discloses that the relevant material terms improve the efficiency and scalability of responding to requests for the delivery of customized dynamically generated webpages to users. Defendant's arguments that the claimed invention does not provide any improvements are merely attorney argument that contradicts the specification and are insufficient overcome this evidence at the Rule 12(b)(6) stage. *See Aatrix*, 882 F.3d at 1130-1331.

Even an argument that the claims only discuss conventional items is insufficient. "[A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." *Bascom*, 827 F.3d at 1350. The claims require a template program unique to the user that is built based on user supplied information including demographic information, and retrieving the template program from at least two locations, and the locations are determined from the frequency of the user request. As discussed in the specification and prosecution history, these limitations are not conventions, particularly in the way they are combined in the claim. When the claims contain limitations "directed to the arguably unconventional inventive concept described in the specification," the specification supports improved computer functionality. *Berkheimer*, 881 F.3d at 1370. The limitations, considered both individually and as an ordered combination, therefore significantly narrow the claim scope from the "abstract idea" and are patent-eligible. *Bascom*, 827 F.3d at 1350, 1352; *McRO,* 837 F.3d at 1315.

The claims therefore do not merely recite the alleged abstract idea "along with the requirement to perform it on the internet, or to perform it on a set of generic computer components." *Bascom*, 827 F.3d at 1350. "Nor do the claims preempt all ways" of "providing targeted advertising to a user" or providing a customized user page with an advertisement. *See id.*; *also McRO*, 837 F.3d at 1315. Instead, the claims provide a new and improved method to more efficiently respond to requests for the delivery of customized dynamically generated webpages to users in a manner that is scalable.

C. The Remaining Claims of the '854 Patent are Patent Eligible

Defendant makes only cursory arguments as to the remaining claims. Like claim 1, independent claims 8 and 15 are also not directed to the abstract ideas of "providing targeted advertising to a user" or "providing a customized user page with an advertisement." They have similar limitations to claim 1 with respect to a template program unique to the user that is built based on user supplied information including demographic information, and retrieving the template program from at least two locations, and the locations are determined from the frequency of the user request. Claims 8 and 15 are therefore patentable for the same reason.

With respect dependent claims 2-7, 9-14, and 16-17, Defendant summarily lists a vague description of the claims followed by concluding that the limitations are "merely pre- or post-solution activities." (D.I. 12 at 19-20). There is no support for their contention that they are merely pre- or post- solution activities. Dependent claims 2-4 and 9-11 relate to the type of demographic information used to build a template program unique to the user. (Ex. A at col. 7:15-21 and 4-12). As explained in the specification and prosecution history, using specific demographic information to build a template unique to the user is not conventional nor obvious. (*E.g.*, Ex. A at col. 5:33-48, col. 6:8-12, 24-48; Ex. C at 10; Ex. D at 6). Dependent claims 5 and 12 require using an advertisement that is based on targeted demographic information. (Ex. A at col. 7:22-23, col. 8:13-

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15). There is no evidence that this was conventional in user-specific templates. Dependent claims

6-7 and 13-14 require the user specific template to include a preference for using real-time

information. (Ex. A at col. 7:24-29, col. 8:16-22). As explained in the specification, using real-

time information was known but there was no option for a user to decide whether it was provided.

(*See* Ex. A at col. 1:42-67). There is no evidence that it was conventional or obvious to include a

user preference for real-time information in a user-customized template.   Much like in *Finjan*,

these claims are patent eligible because they recite a specific way to solve the problem making the

delivery of customized dynamically generated webpages to users more efficiently and scalable.

879 F.3d at 1305.

CONCLUSION

For the foregoing reasons, Digi Portal LLC respectfully requests that this Court deny

Defendant's Motion to Dismiss for Failure to State a Claim (D.I. 11, 12).

December 28, 2018   DEVLIN LAW FIRM LLC

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing

document has been served on December 28, 2018, to all counsel of record who are deemed to have

consented to electronic service via the Court's CM/ECF system per Local Rule CV-5.

/s/Timothy Devlin
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